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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,273	08/19/2003	Jeremy John Carroll	B-5212 621174-8	5180

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

WASHBURN, DANIEL C

ART UNIT	PAPER NUMBER
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2628

MAIL DATE	DELIVERY MODE
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11/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/644,273

Applicant(s)

CARROLL, JEREMY JOHN

Examiner

Dan Washburn

Art Unit

2628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19,22,25,26 and 28-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-18,25 and 26 is/are allowed.
- 6) ☒ Claim(s) 1-14,19,22 and 28-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-14, 19, and 28-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, claims 1-14, 19, and 28-31 are indefinite because independent claims 1 and 19 each use the language, "inter alia," which renders the claims indefinite as it is unclear as to what other things the claims refer to.

The term "significant manner" in claims 3 and 4 is a relative term which renders the claim indefinite. The term "significant manner" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

The last two lines of page 2 of the specification and the first 10 lines of page 3 of the specification describe that deterministic modifications may, in layman's terms, be thought of as significant modifications which do not depend on insignificant parts of the document, and further describes that non-deterministic modifications are significant modifications which may depend on insignificant parts of the document. Finally, the same section describes that modifications of the data following processing in accordance with the second set of rules is/are non-deterministic modifications (i.e.

significant), but may be labeled as insignificant. Thus, while the specification has described significant modifications, and other significant modifications that may be labeled as insignificant modifications, it fails to provide clear definitions of modifying data in a significant manner versus modifying data in an insignificant manner.

The term "significant data" in claims 8-10 is a relative term which renders the claim indefinite. The term "significant data" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

The last paragraph of page 1 of the specification describes a process of removing insignificant data, but doesn't offer clear definitions of significant data and insignificant data.

The term "significant additions" in claim 10 is a relative term which renders the claim indefinite. The term "significant additions" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

The last paragraph of page 1 of the specification describes data that is considered insignificant, but doesn't offer clear definitions of significant additions versus insignificant additions.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 19, 22, and 32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 19, 22, and 32 describe a computer program comprising program instructions embodied on a computer readable medium, which is considered a data structure per se. The claim is directed to a computer program, where the intended use of the computer program is to place the program instructions on a computer readable medium. Thus, the computer readable medium is optional, which means the claim is potentially directed to a data structure per se. Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing a functional change in the computer. See, e.g. Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. ***The preamble of the claim should describe a computer***

readable medium encoded with a computer program, the computer program containing a set of instructions that when executed by a computer, cause the computer to carry out the method described by the body of the claim. When the preamble is written in this manner it ensures that the claim is drawn to a computer readable medium with a computer program encoded thereon, rather than a computer program that may be stored within a computer readable medium.

Allowable Subject Matter

Claims 15-18, 25, and 26 are allowed.

Claims 1-14 and 28-31 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Claim 19 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, and the rejection(s) under 35 U.S.C. 101, set forth in this Office action.

Claims 22 and 32 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 101, set forth in this Office action.

REASONS FOR ALLOWANCE

The prior art fails to disclose or reasonably suggest a method of canonicalizing an RDF graph having a plurality of blank nodes, the method comprising: generating a representation of the RDF graph and ordering the representation, the plurality of blank nodes being substantially omitted from the ordering process; assigning a label to each of a number of the plurality of blank nodes; modifying the portion of the blank nodes remaining unlabelled; and reordering the representation, as described in claim 15.

The prior art further fails to disclose or reasonably suggest a method of signing an RDF graph comprising the steps of: canonicalizing the graph by ordering triples from the graph and omitting blank nodes from the process of so ordering; and generating a signature in the form of a triple, wherein the method is used to canonicalize an RDF graph expressed as said input data, the RDF graph having a plurality of blank nodes, wherein the process includes a first set of rules...a second set of rules...and a third set of rules, as described in claim 25.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Washburn whose telephone number is (571) 272-5551. The examiner can normally be reached on Monday through Friday 8:30 a.m. to 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on (571) 272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DW

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11/21/07



KEE M. TUNG
SUPERVISORY PATENT EXAMINER